

Appendix A. Classification of deposit models by lithologic-tectonic environment

[Partial list of table 1 of Cox and Singer (1986); only applicable parts and modifications given. Some deposit-type numbers have been previously assigned for industrial mineral deposit types (G.J. Orris, written commun., May 1990), which has affected the numbers given here. *, indicates that model is not included in this bulletin]

| Deposit environment | Model No. |
|-----------------------------------------------------|-----------|
| <u>Mafic and ultramafic intrusions</u> | |
| C. Alkaline intrusions in stable areas | |
| Carbonatite..... | 10 |
| (Thorium-rare-earth veins)..... | (11d) |
| Alkaline complexes..... | 11 |
| Thorium-rare-earth veins..... | 11d |
| <u>Felsic intrusions</u> | |
| E. Porphyroaphanitic intrusions present | |
| Other felsic and mafic rocks including alkalic | |
| Wallrocks are calcareous | |
| Deposits far from contact | |
| Distal disseminated Ag-Au..... | 19c |
| <u>Extrusive rocks</u> | |
| G. Felsic-mafic extrusive rocks | |
| Subaerial | |
| Deposits mainly within volcanic rocks | |
| Hot-spring Au-Ag..... | 25a |
| Deposits in older calcareous rocks | |
| Sedimentary-hosted Au ¹ | 26a |
| Marine | |
| Sierrankuroko massive sulfide..... | 28a.1 |
| <u>Sedimentary rocks</u> | |
| I. Carbonate rocks | |
| No associated igneous rocks | |
| Solution-collapse breccia pipe U..... | 32e |
| J. Chemical sediments | |
| Shelf | |
| Oolitic ironstones..... | 34f |
| <u>Regionally metamorphosed rocks</u> | |
| K. Derived mainly from eugeosynclinal rocks | |
| Chugach-type low-sulfide Au-quartz vein..... | 36a.1 |
| <u>Surficial and unconformity related</u> | |
| M. Residual | |
| Laterite-saprolite Au..... | 38g |
| N. Depositional | |
| (Laterite-saprolite Au)..... | (38g) |
| <u>Regional geologic structures</u> | |
| O. Extended terranes | |
| Detachment fault-related polymetallic deposits..... | 40a |
| Lacustrine Mn..... | 40b* |

¹Note name change from "Carbonate-hosted Au-Ag" found in Cox and Singer (1986); other changes described in model text.